

L1012

L1012 (REV B): RECALL 1002 - LIVEWIRE S2 DEL MAR FASTENER INSPECTION

Reason for Revision

Refer to Table 1.

Table 1. Document History

		-				
Date	Rev	Revision (Rev) Description				
2023-04-	В	Update Credit Table.				
03	D	* Updated: Credit Procedure				
2023-03-	^	Update legend in Fig 2.				
26	26 A	* Updated: Install Motor				
2024-03-21	-	Initial release				

Purpose for Service Bulletin

This bulletin informs dealers of a voluntary safety recall that LiveWire will be conducting on a small population of S2 Del Mar vehicles.

The issue on these select Vehicle Identification Numbers (VINs) relates to an improperly performed inspection conducted by a third-party subcontractor at our factory which may have allowed some vehicles to leave the factory with insufficiently tightened components.

This procedure should be followed in sequence exactly for each vehicle to ensure that all fasteners are torqued properly.

If a customer vehicle needs to be picked up for this work, contact LiveWire Technical Service for reimbursement 833-951-7433.

NOTE

This procedure should only be performed on a vehicle that has no pre-existing issues or concerns. If any are noted, those issues should be resolved before proceeding with the recall.

Vehicles Affected

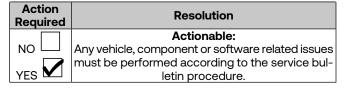
2024: Del Mar (S2DM)

Markets Affected

United States.

Required Dealer Action

Table 2.



There is a supplemental video that provides an animation of the recall procedure that can be used for reference.

Follow link here: https://youtu.be/3FUjV5-t7WE

De-Energize Vehicle

1. Follow Service Manual procedure to properly de-energize and lock out the vehicle.

Right Foot Support

- 1. Skid plate removal.
 - a. Remove filter ground strap from filter assembly.
 - b. Disconnect inlet harness from filter assembly.
 - c. Remove screws fastening skid plate to vehicle.
 - d. Disconnect Onboard Charger (OBC) filter harness retaining clip from coolant hose (leave radiator overflow hose attached).
 - e. Disconnect OBC filter harness from Power Electronics Unit (PEU).
 - f. Move skid plate to the left side of vehicle to allow clearance.
- 2. Motor cover removal.
 - a. Remove screws fastening motor cover to Rechargeable Energy Storage System (RESS) and right foot support.
- 3. Brake line/wire harness caddy and right P-clip removal.
 - a. Remove brake line/wire harness caddy.

NOTE

In the interest of preserving customer safety and satisfaction, always check for outstanding recalls whenever any motorcycle is brought into your dealership for either maintenance or service.

ROUTING	SERVICE MANAGER	SALES MANAGER	PARTS MANAGER	WARRANTY PROCESS MANAGER	LEAD TECHNICIAN	TECHNICIAN NO. 1	TECHNICIAN NO. 2	TECHNICIAN NO. 3	RETURN THIS TO
INITIAL HERE									

4. Remove right foot support with rear master cylinder still installed.

Swingarm Dismount

- 1. Secure vehicle.
- 2. Jack rear wheel off the ground using a scissors jack under the flat surface at the bottom of the PEU.
- 3. Remove left foot support.
- 4. Remove belt guards.
- 5. Loosen rear axle.
- 6. Remove drive belt.
 - a. Loosen axle adjuster on each side equally.
 - b. Remove drive belt from motor sprocket.
- 7. Remove rear shock lower bolt and motor to rocker bolt.
- 8. Remove brake line P-clamp on motor.
- 9. Remove first brake line P-clamp on right side of swingarm.
- 10. Remove first two rear lighting Christmas tree fasteners on left side of swingarm.
- 11. See Figure 1. Remove both swingarm bearing caps (2).

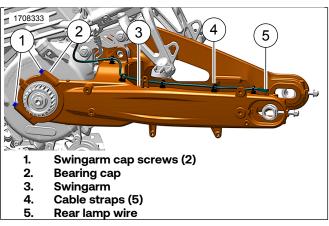


Figure 1. LH Swingarm

12. NOTE

Lower flat jack a few inches to reduce strain on brakes lines.

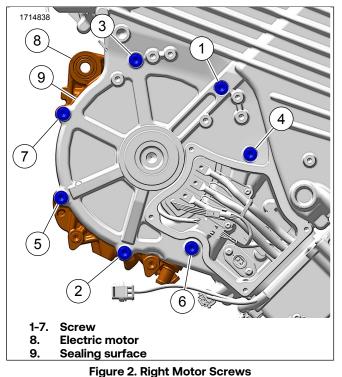
Carefully pull swingarm back and down to disengage from bearings, tip front of swingarm down and set it on to work surface.

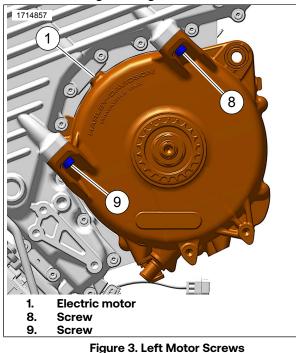
Dismount Motor and Inspection

- 1. Remove High Voltage cover door on right side of vehicle.
 - a. Inspect cover seal and replace if any damage or deformities are noted.
- 2. Disconnect the two low voltage connectors.
- 3. Disconnect 3 phase high voltage fasteners from motor.
 - a. Remove screws from 3 phase lead caddy.
- 4. Place a second flat jack with blocks of wood to support motor.
 - a. Recommended: Protect painted parts around left side tail section seat support weldment.
 - b. Route a ratchet strap around the weldment then around the motor bearing.
 - c. Take slack out of strap. This will allow additional support of the motor.
- 5. Remove seven right side motor screws.
- 6. Remove two left side motor screws.
- 7. Carefully rotate motor several inches away from RESS assembly to provide tool access.
 - a. Inspect motor seal for any damage or if it has become unseated. Replace if necessary.
- Torque stator retaining ring fastener. Tighten. Torque: 2.6–3.2 N·m (23–28 in-lbs)

Install Motor

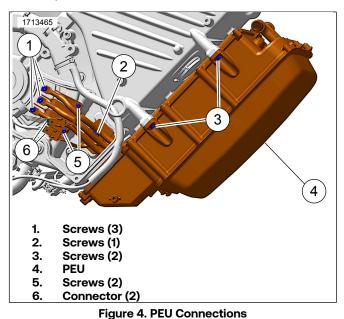
- 1. See Figure 2 and Figure 3. Ensure seal is properly seated in motor groove and align motor to RESS and start the seven fasteners on the right side of the vehicle.
 - a. Remove ratchet strap from motor.
 - b. Start two fasteners on left side of vehicle.





- Tighten screws (5) and (7).
 Torque: 5–7 N·m (44–62 in-lbs)
- Tighten left side screws (8) and (9).
 Torque: 31.5–38.5 N·m (23–28 ft-lbs)
- Tighten right side screws (1-7) in sequence. Torque: 31.5−38.5 N·m (23−28 ft-lbs)
 - a. Remove flat jack and wood.

- Install 3 phase caddy. Tighten screws. Torque: 2.4–3 N·m (21–27 in-lbs)
- Install 3 phase leads to motor. Tighten. Torque: 5.3–6.5 N·m (47–58 in-lbs)



- 7. Reconnect low voltage connectors and attach to caddy retainers.
- 8. Inspect HV cover seal and ensure it is properly seated.
 - a. Install High-Voltage cover. Tighten. Torque: 5–6.1 N·m (44–54 **in-lbs**)

Install Swingarm

- 1. Lift swingarm and ensure brake lines route under the shock rocker.
- 2. Align and set swingarm against bearings securely.
- Install bearing caps. Tighten beginning with left side. Torque: 37.5–41.4 N·m (28–31 ft-lbs)
- Install forward P-clamp on right side of swingarm. Tighten. Torque: 8–10 N·m (71–89 in-lbs)
- Install P-clamp on motor. Tighten. Torque: 8–10 N·m (71–89 in-lbs)
- 6. Align rear shock rocker and install bolts.
 - a. Raising or lowering the vehicle on the jack can aid with alignment.
- Tighten shock to rocker bolt.
 Torque: 90–100 N·m (66–74 ft-lbs)
- Tighten motor to rocker bolt.
 Torque: 90–100 N·m (66–74 ft-lbs)

9. Connect rear lighting Christmas tree fasteners on left side of swingarm.

Tension Belt

- 1. Install belt on to sprocket and pulley.
- 2. Turn axle adjusters equal turns to take slack out of belt.
- 3. Adjust belt tension:
 - a. 57-63 Hz if new.
 - b. 48-52Hz if in service.
 - c. Or, adjust using Special Tool to 1/4 to 3/8-inch deflection.
 Special Tool: BELT TENSION GAUGE (HD-35381-A)
- 4. Lower vehicle and remove jack.
- 5. Tighten axle nut. Torque: 129–142 N·m (95–105 ft-lbs)
- 6. Install E-clip on axle.

Install Right Foot Bracket

- Install right foot bracket assembly. Tighten. Torque: 28–36 N·m (21–27 ft-lbs)
- Install brake line/wire harness caddy. Tighten. Torque: 5–7 N·m (44–62 in-lbs)
- Install front right P-clip. Tighten. Torque: 5–7 N·m (44–62 in-lbs)
- Install motor cover. Tighten.
 Torque: 5.9–6.5 N·m (52–58 in-lbs)

Install Belt Guard

- Install upper and lower belt guards. Tighten. Torque: 5.9–6.5 N·m (52–58 in-lbs)
- Install sprocket cover and screws. Tighten. Torque: 5.9–6.5 N·m (52–58 in-lbs)

Install Left Foot Bracket

 Install left foot bracket. Tighten. Torque: 28–36 N·m (21–27 ft-lbs)

Install Skid Plate

- 1. Place skid plate underneath vehicle.
- 2. Connect OBC filter harness to PEU.
 - a. Ensure harness crosses over the Inlet harness and under the coolant hoses.

- 3. Connect coolant hose retaining clip. Ensure the lock is oriented facing down and position rear of the white alignment marks on the hose. This will help prevent contact with side stand spring.
- 4. Connect Inlet harness to OBC filter assembly.
 - a. Ensure both connector locks are fully engaged.
- 5. Lift skid plate and route the ground strap under the OBC filter.
- Install skid plate screws. Tighten. Torque: 12.9–14.4 N·m (10–11 ft-lbs)
- Install ground strap screw. Tighten. Torque: 5–7 N·m (44–62 in-lbs)

Energize Vehicle

- 1. Remove fuse block cover.
- 2. Install 40 amp fuse.
- 3. Stow fuse block in rear caddy.

Complete

- Install top cover. Tighten fasteners. Torque: 5.9–6.5 N·m (52–58 in-Ibs)
- 2. Turn vehicle ignition ON.
- 3. Connect Digital Technician II (DT II).
- 4. Navigate to Vehicle Setup.
- 5. Select Resolver Offset and perform the procedure.
- 6. Check Diagnostic Trouble Codes (DTCs). Clear if any are found.
- 7. If any DTCs return. See the Electrical Diagnostic Manual (EDM) to troubleshoot.
- 8. Install seat. See service manual.

Credit Procedure

NOTE

Enter bulletin and any part numbers with quantities replaced into comment section of claim.

Submit a warranty claim per Table 3.

Table 3. S2 Del Mar Fastener Inspection

ITEM	DATA		
Claim Type	Recall		
Customer Concern Code	1002		
Condition Code	9981		
Problem Part Number	10100089		
Replacement Part Number	N/A		
Quantity	N/A		
Model	S2 Del Mar		
Model Year	2024		
Labor Time	3 hours		
(1) Download may be required			